

A man with white hair, wearing a black baseball cap with a logo, a black jacket over a grey shirt, and blue jeans, is kneeling in a snowy field. He is holding a large, fluffy dog with brown, white, and black fur. In the background, several white wind turbines are visible against a bright, overcast sky. The man is smiling at the camera.

The Promise of Wind

Indiana's Wind Energy Leadership

Denise Bode

**Chief Executive Officer
American Wind Energy Association**

American Wind Energy Association

AWEA is the trade association for the wind energy industry

- **2,500 business members including manufacturers, developers, transportation, utilities, construction, insurers, financial community and technical support and forecasting representing 75,000 wind jobs**
- **Develops policies and conducts analysis to support wind industry growth**
- **Execute wind industry's legislative agenda**
- **Promotes wind energy through advocacy, advertising and media relations**
- **Convenes conferences and workshops to educate the public and bring industry members together.**

www.PowerofWind.com www.awea.org



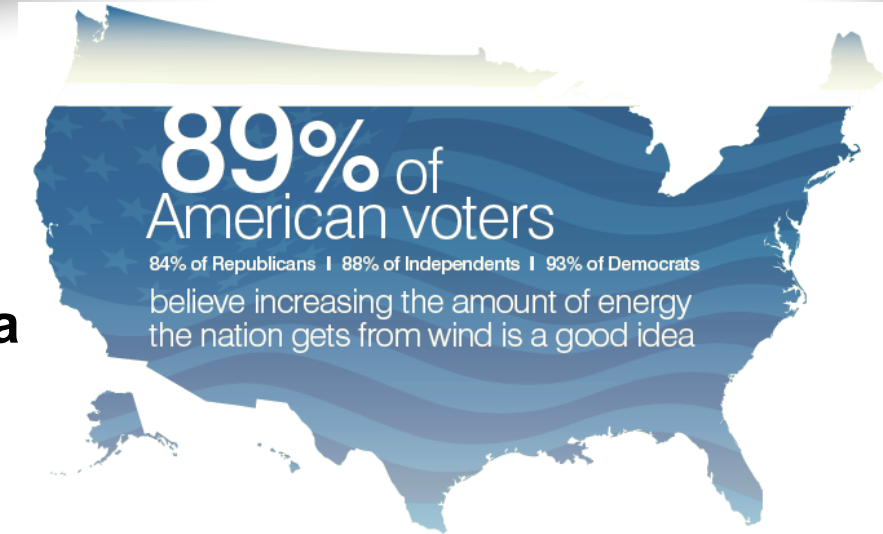
American wind power is delivering today.

- **Inexhaustible American energy resource, enough to power the U.S. nearly 13 times over, and in 2010 produced as much energy as 10 nuclear power plants**
- **Wind power installed 35% of all new generation since 2007, more than coal and nuclear combined**
- **Costs continues to decline making wind cheaper than new nuclear and coal plants and competitive with natural gas**
- **Long term contracts for wind with no fuel cost offers utilities a hedge against fuel price volatility risk**
- **Zero air impacts provides utilities a hedge against risk posed by environmental regulations through EPA, federal legislation, state regulations**
- **Wind uses no water avoiding risk posed by other energy production and generation**

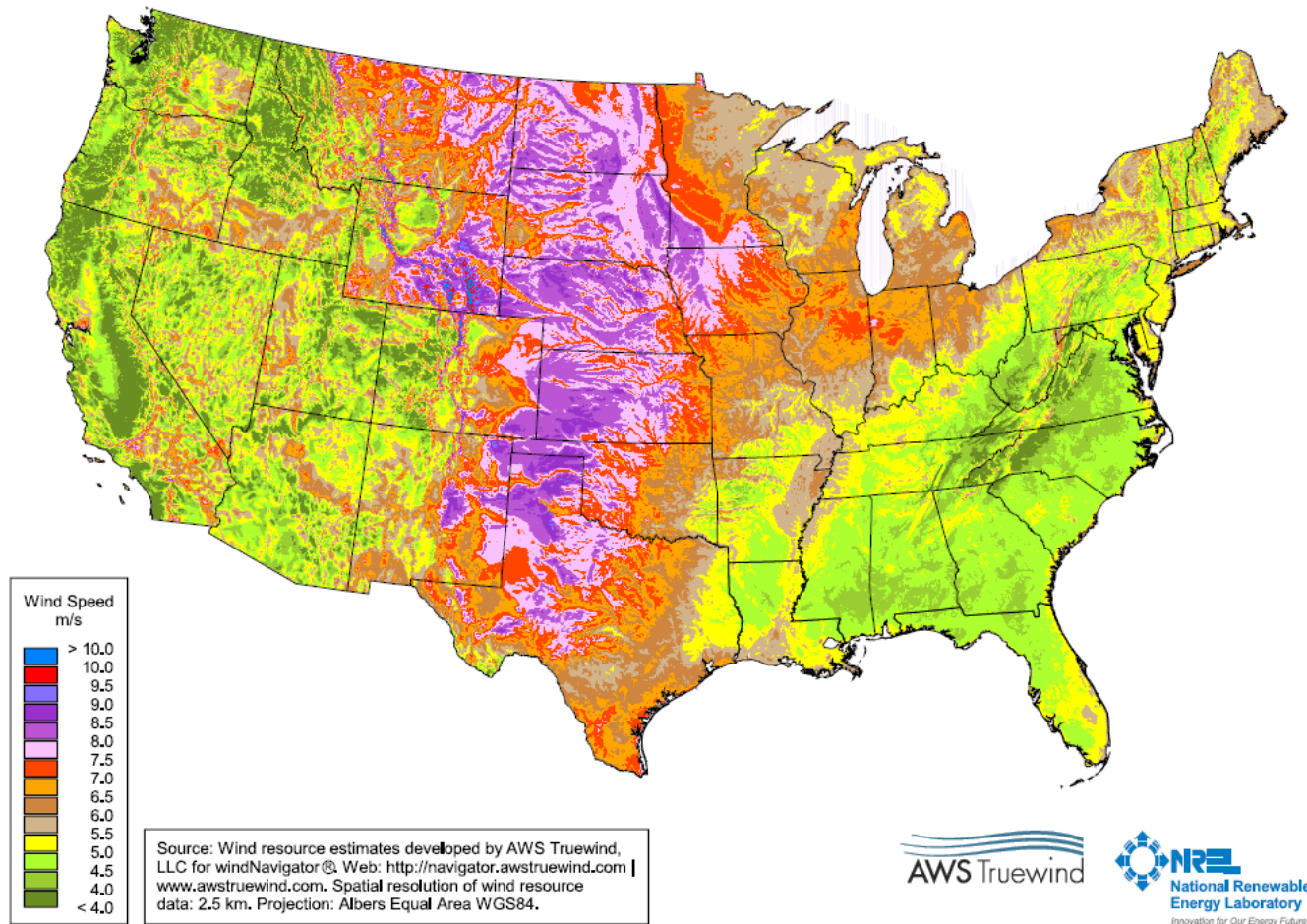
Wind Power: America's & Indiana's Choice

Indianans overwhelmingly support renewable energy.

- 600 registered Hoosiers voters were polled in February 2011
- 77% of Indianans believe it is not only important for Indiana to have a renewable energy requirement but 77% also supported the legislative proposal requiring that 10% of the electricity in the state come from wind and solar energy by the year 2020
- Support for the proposal cut across gender, age, education, partisan and geographic lines in the state
- 84% supported the development of more wind projects in the state over the next two years



Inexhaustible American wind energy is already producing 41,400 MW today—onshore & offshore wind resources could electrify the nation 13 times over in the future.

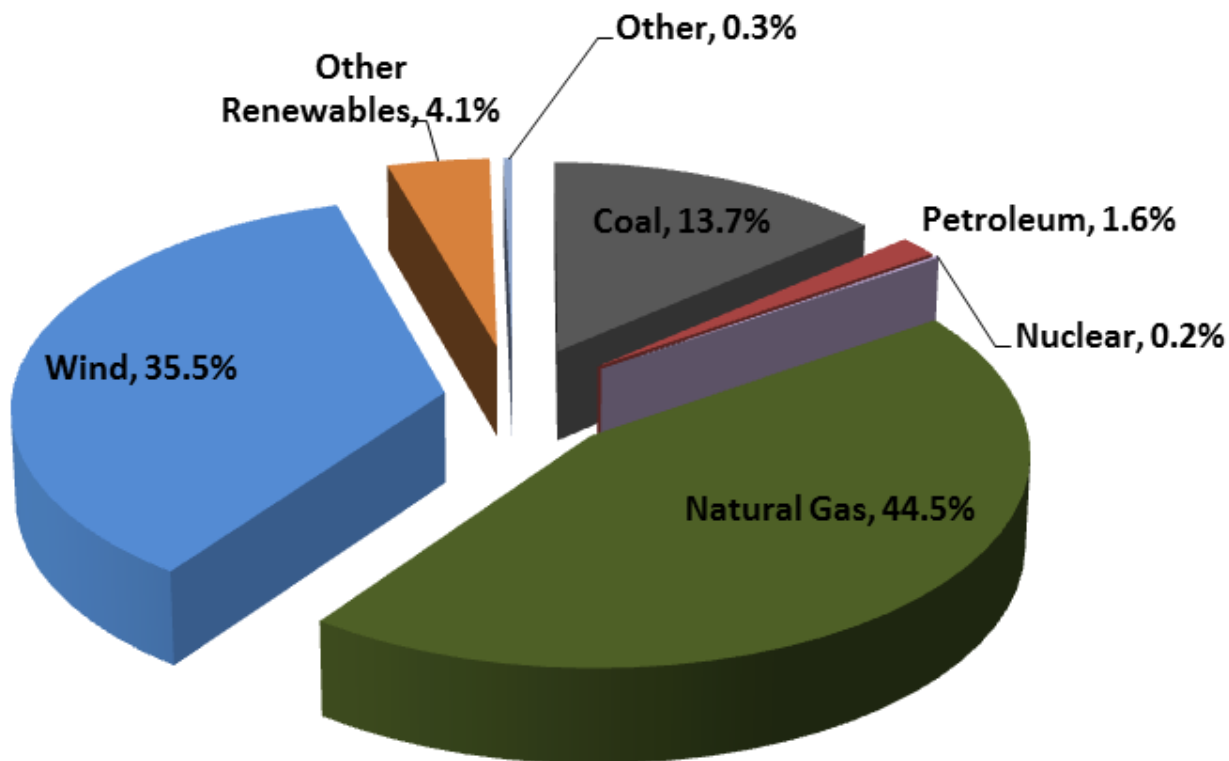


Wind has captured 35% of all new generating capacity in America since 2007.

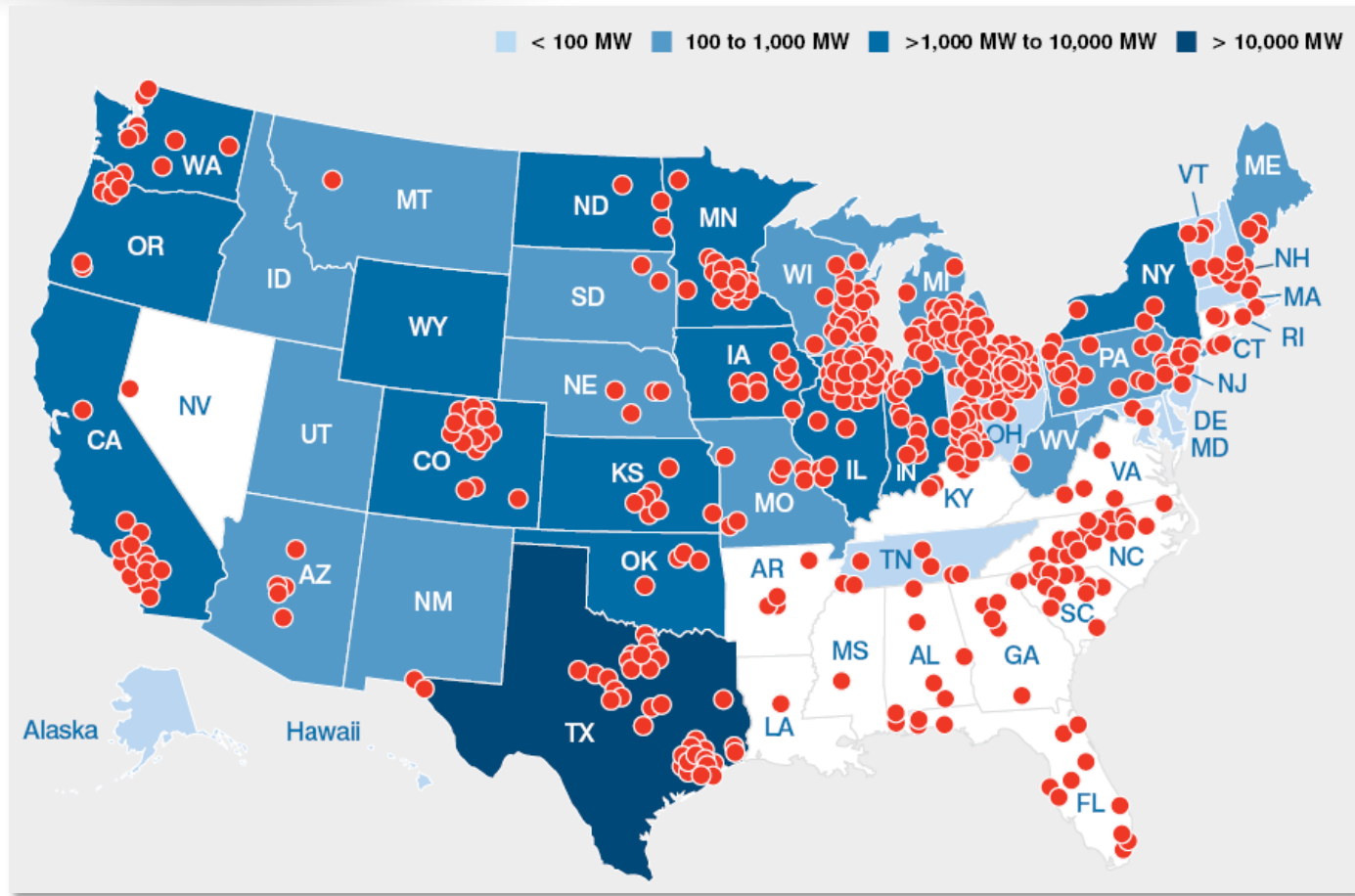
Percent of New Installed Capacity, 2007-2010

Nearly 81,000 MW of new generating capacity installed between 2007 and 2010.

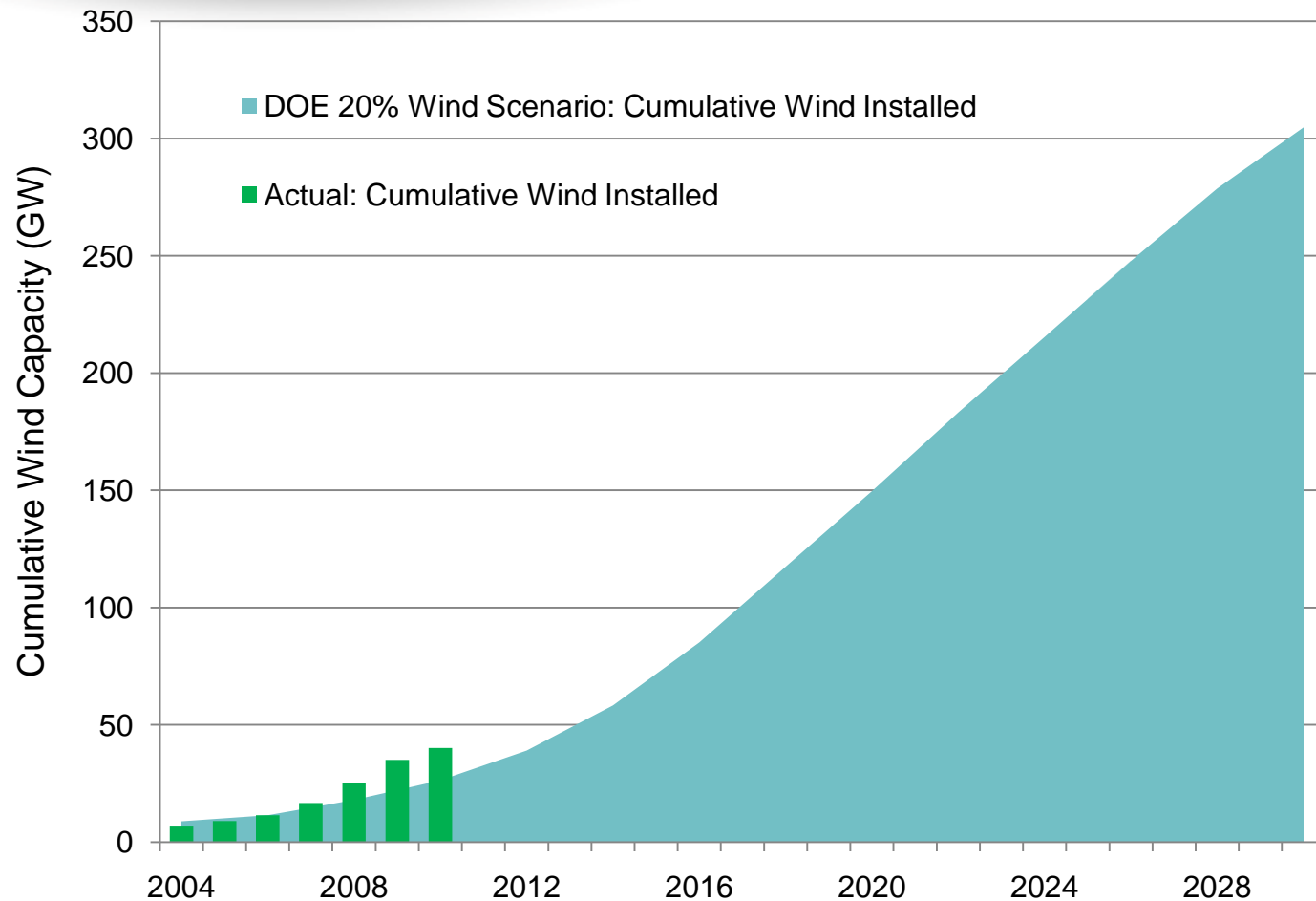
Wind installed over 35% of all new generating capacity between 2007 and 2011, over 29,000 MW.



With 400 facilities, wind is one of the fastest-growing sources of U.S. manufacturing jobs.

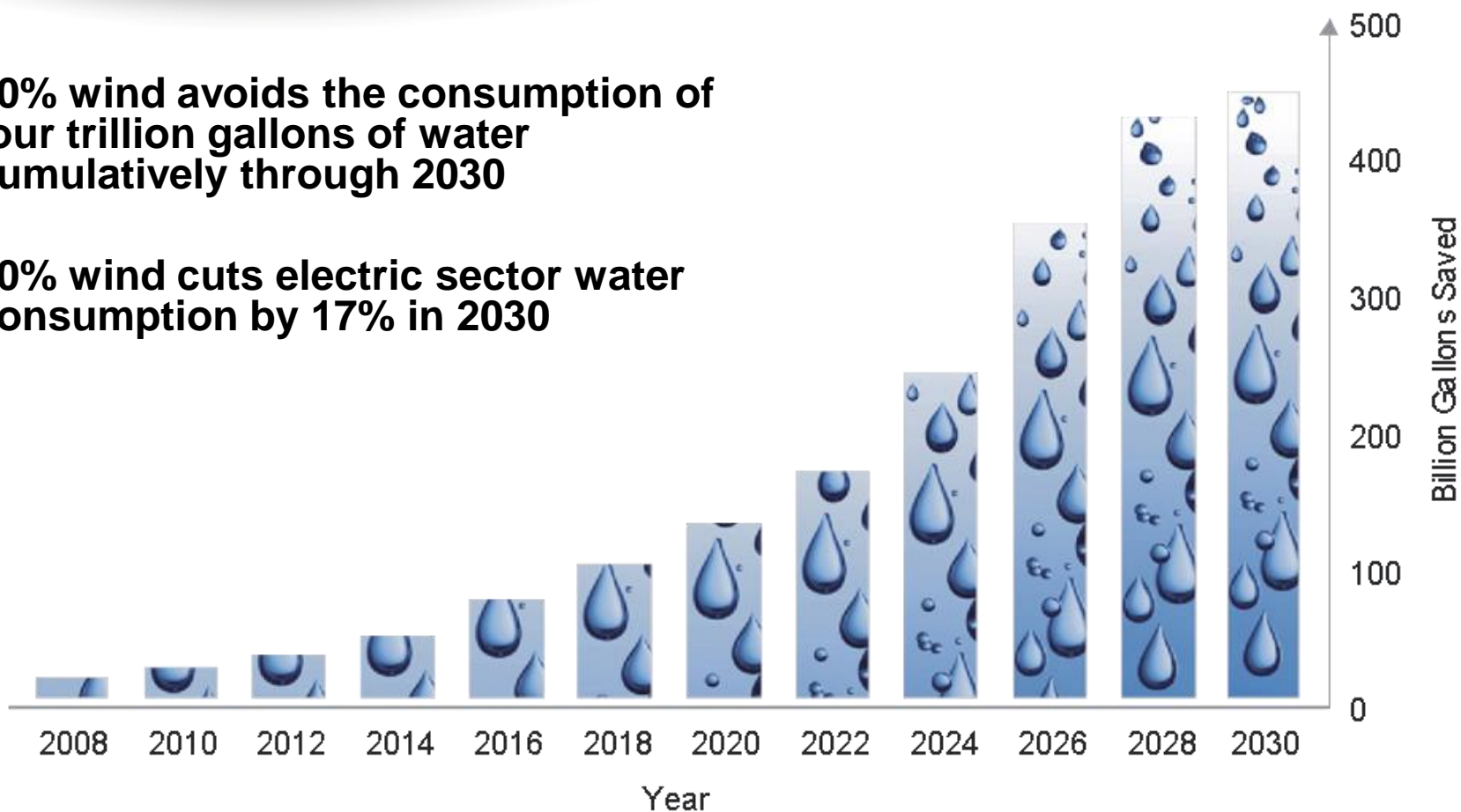


U.S. wind power installations are ahead of projected path for 20% by 2030.



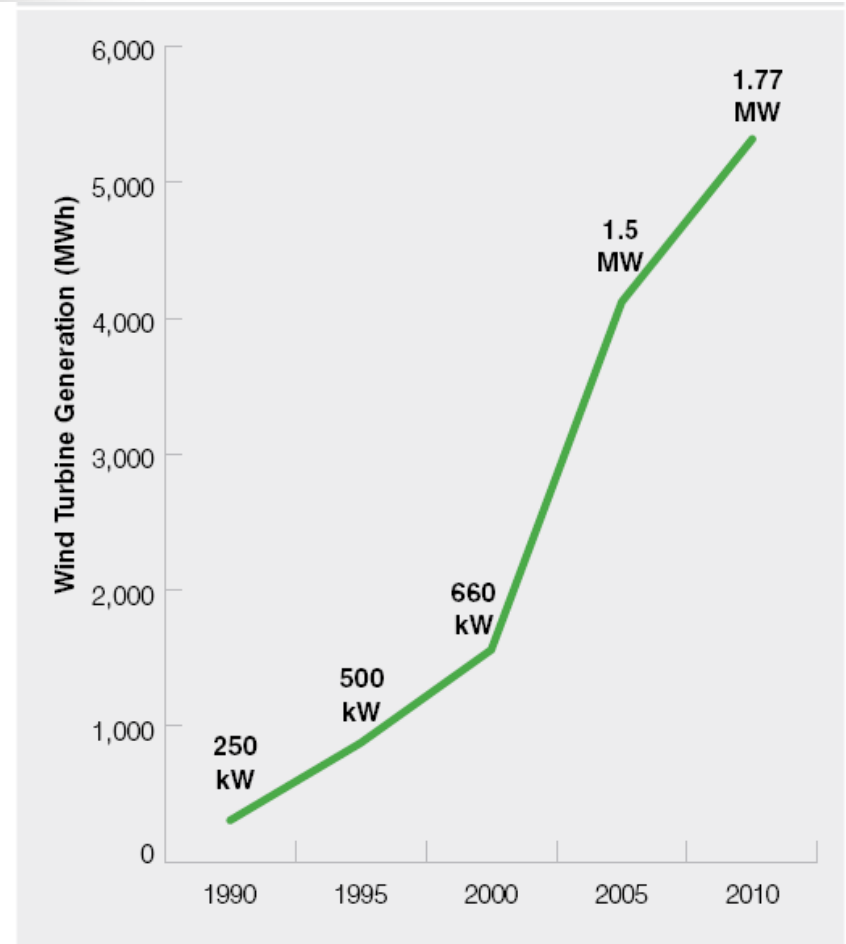
Wind power uses no water.

- **20% wind avoids the consumption of four trillion gallons of water cumulatively through 2030**
- **20% wind cuts electric sector water consumption by 17% in 2030**



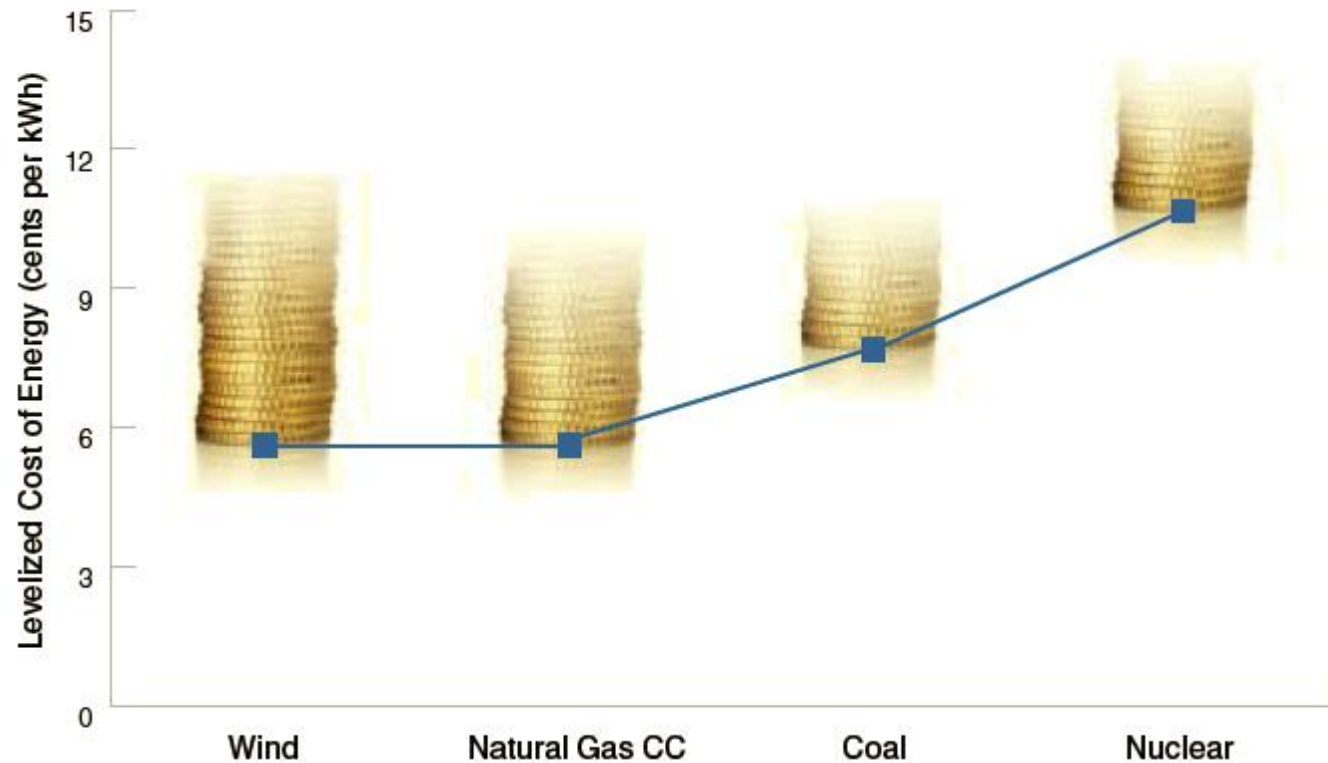
Wind turbine productivity is increasing, costs are decreasing.

- Turbines' availability to generate is usually above 98%
- Taller towers and better siting technology have enabled project owners to achieve capacity factors in the high 30% and low 40% annually in the best wind resource areas
- A turbine with a nameplate capacity seven times larger can produce more than 15 times more power



American wind power is affordable

- Wind energy is nearly cost competitive with all other new electric generation sources.
- In Indiana, wind will save ratepayers over \$60 million per year.



Recent costs of affordable wind energy

- The Illinois Power Agency competitive auction in mid-2010 for the procurement of 20-year bundled power purchase agreements (PPAs) for ComEd and Ameren-Illinois consumers.
- The contracts are set to commence delivery on June 1, 2012.

**Quantity
(kWh)**

Ameren 600,000,000

ComEd 1,261,725,000

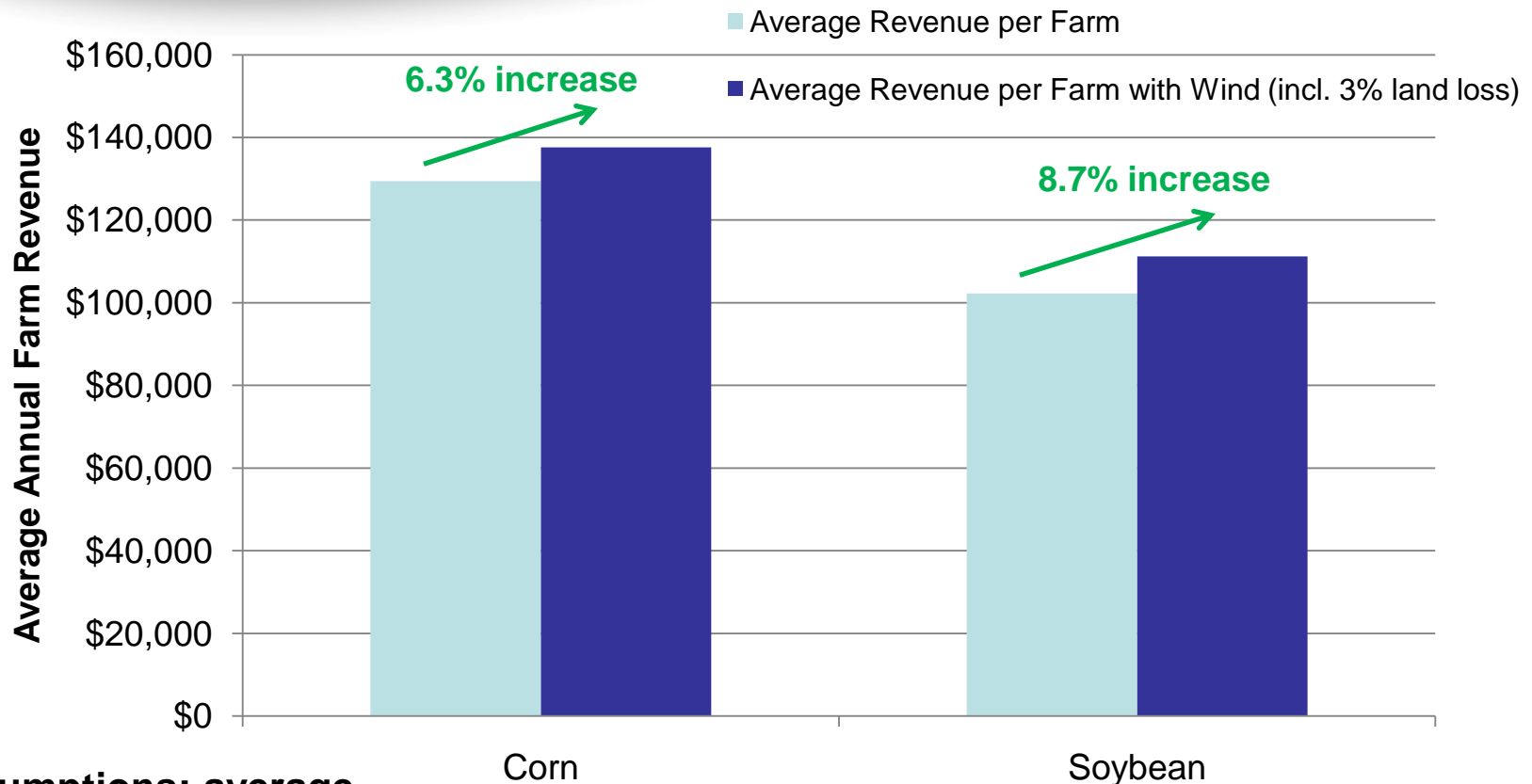
**Average Cost
(cents/kWh)**

5 cents

5.5 cents

Wind: A Cash Crop in Indiana

based on 2010 ACRE Program guarantee prices & 242 acre average farm size in IN



Wind Assumptions: average revenue of \$3,000 per MW installed and 60 acres per MW

Policy Status & Path Forward:

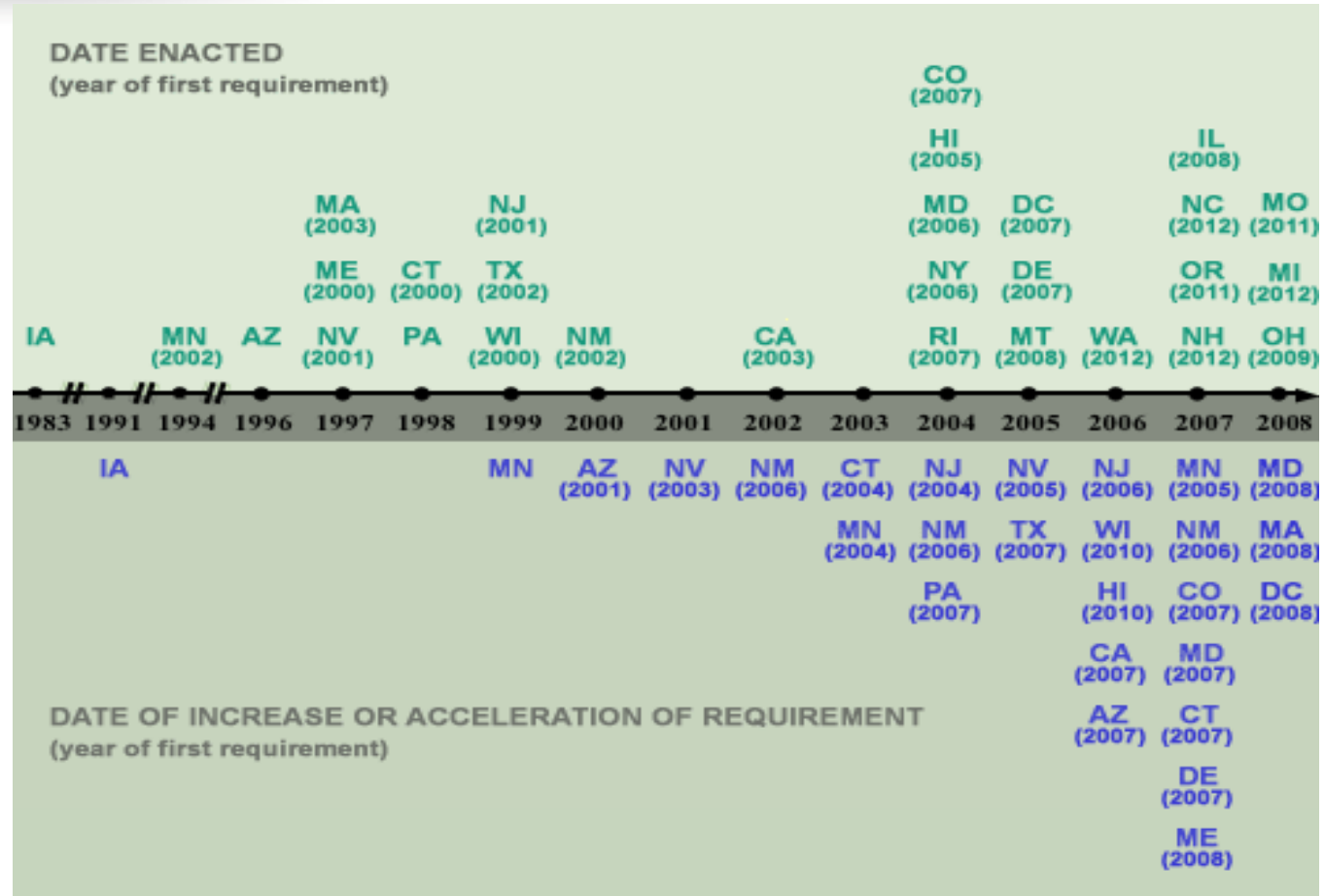
U.S. “Portfolio Approach” to Policy

U.S. approach to energy policy often involves a portfolio of policies at the state and national level:

- **Continued focus to pass a national long term renewable energy policy for utilities to have a more balanced generation mix, and long term tax policy that encourages investment, and expedites transmission build-out, as well as creates certainty for domestic manufacturers.**
- **Greater focus by AWEA on state jurisdiction over power generation through state regulatory process. States like California, Colorado increasing targets for new opportunities. As wind is becoming cost competitive with natural gas, it encourages a greater balance in state portfolios. States are tweaking state RPS and tax policy to drive demand.**

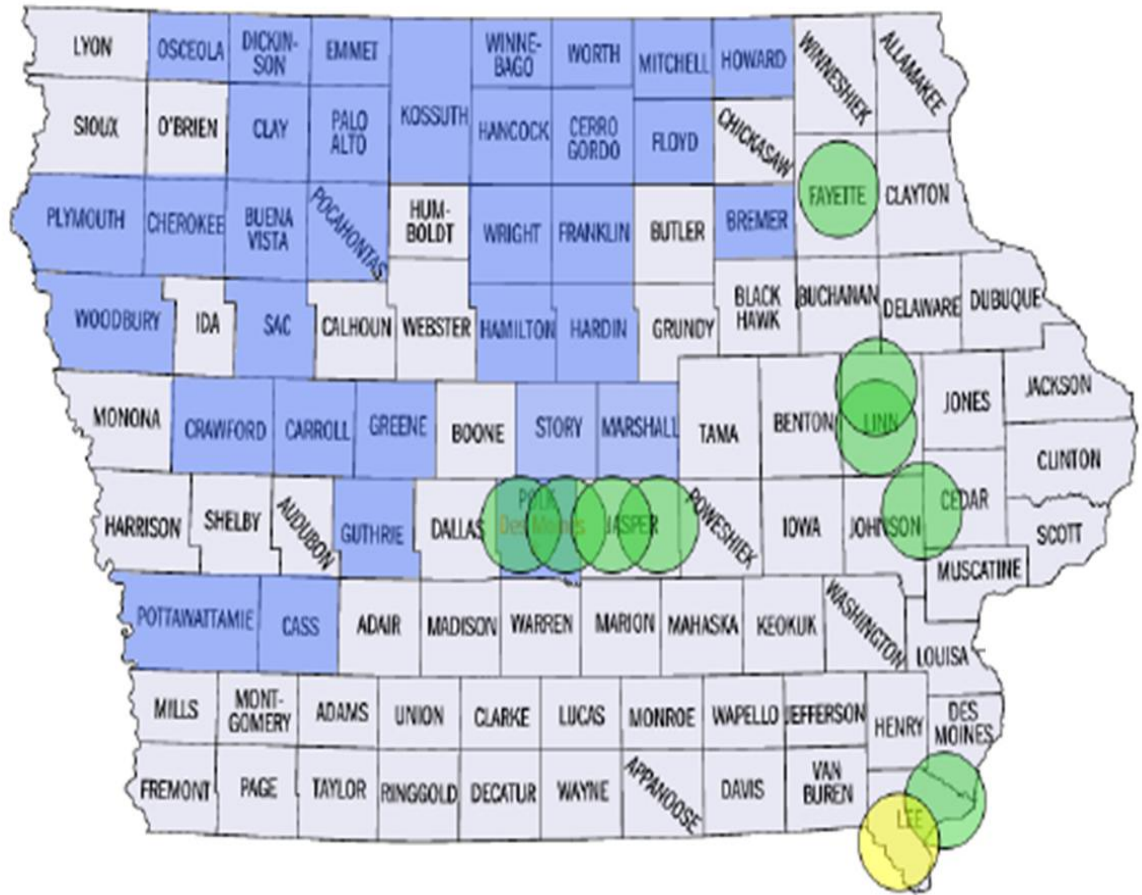
Portfolio Approach: State & Regional Leadership

States with Renewable Portfolio Standards have created a market for wind with over 90% of the renewable energy build in states with RPS programs or goals.



Iowa: case study of state leadership in growing wind generation and manufacturing

Iowa which enacted a renewable standard in 1983, now has the greatest percentage of electricity generated from wind: 3,675 MW, approaching 20% of the state's electricity, and is a leading state in attracting manufacturing.



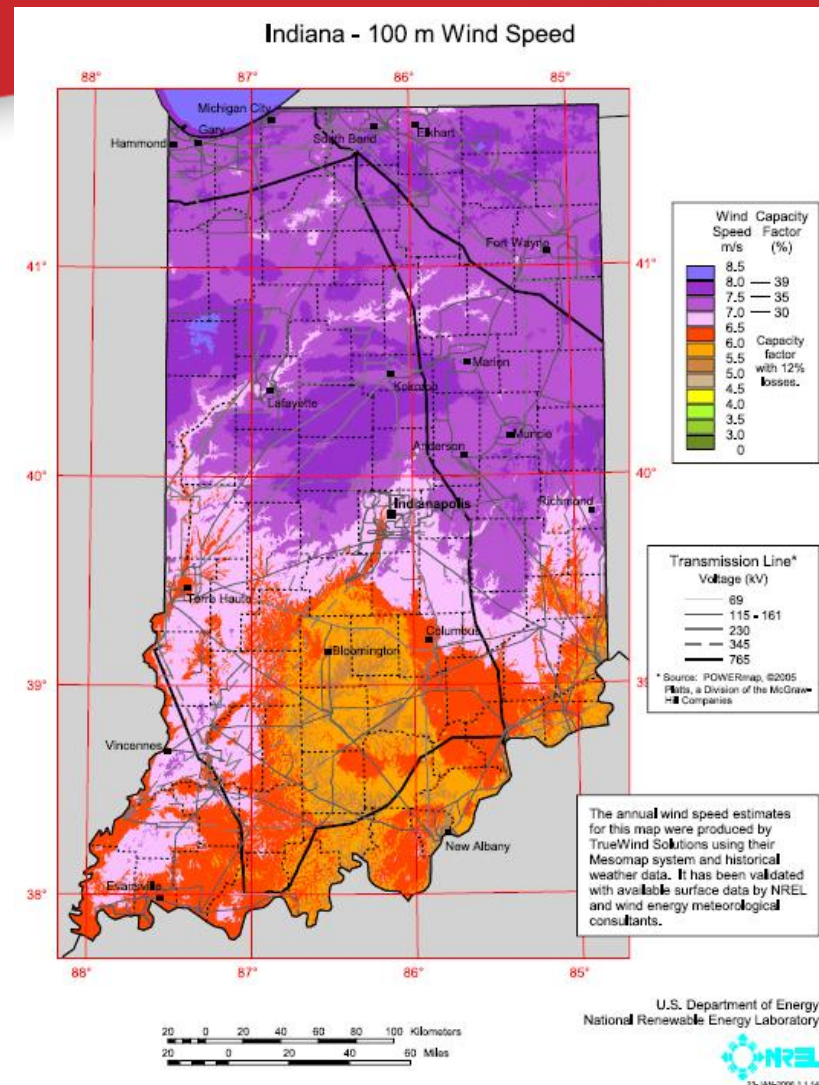
SB 251: voluntary Clean Energy Portfolio Standard for Indiana 10% by 2025



- **Governor Mitch Daniels signed in to law a voluntary Clean Energy Portfolio Standard (CPS) which set a goal of 10 percent of the state's electric generation to come from clean energy sources by 2025 and incentivizes utilities to participate in the CPS.**
- **Encourages investment in the state's growing wind industry as well as other forms of lower-emission energy, including solar, nuclear, clean coal, and hydro.**
- **CPS will create a stable business and investment environment for Indiana.**

Indiana has an incredible wind resource.

- Wind resource ranks 15th in U.S.
- Wind could provide over 400 percent of the state's current electricity needs
- Wind provided 2.4% of Indiana's power in 2010



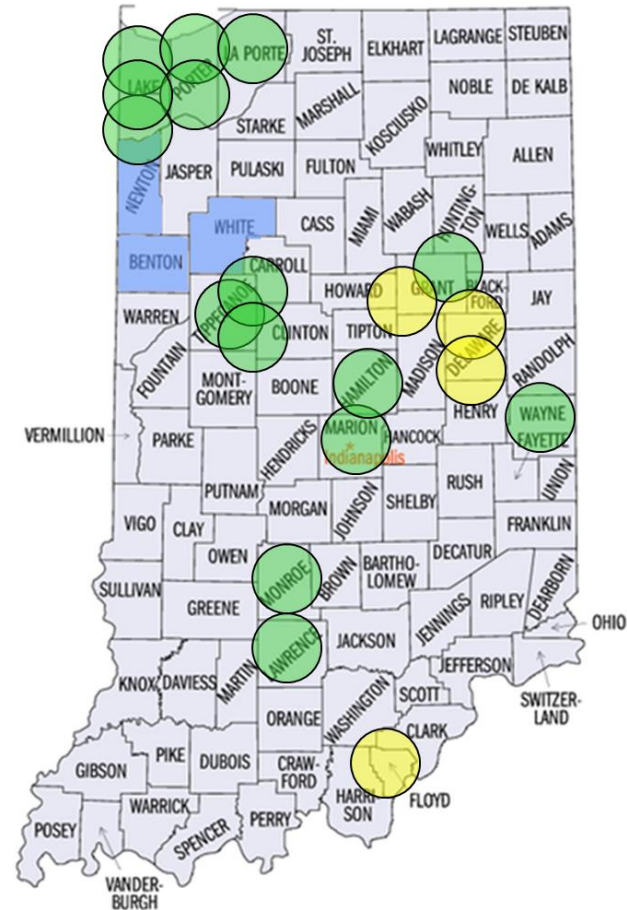
Indiana is one of the fastest growing states for wind capacity additions.

- **1,339 MW online as of 1Q2011**
- **8,426 MW of wind projects in queue**
- **12th in U.S. in installed wind capacity**
- **Indiana wind farms now online power the equivalent of more than 325,000 homes.**



Indiana has attracted major investment from the wind sector.

- At least 14 Indiana facilities currently manufacture components for the wind energy industry.
- Four new facilities are planned and/or under construction.
- Many smaller Indiana companies have found a role in the wind energy supply chain, creating new green-collar jobs for Indiana workers.

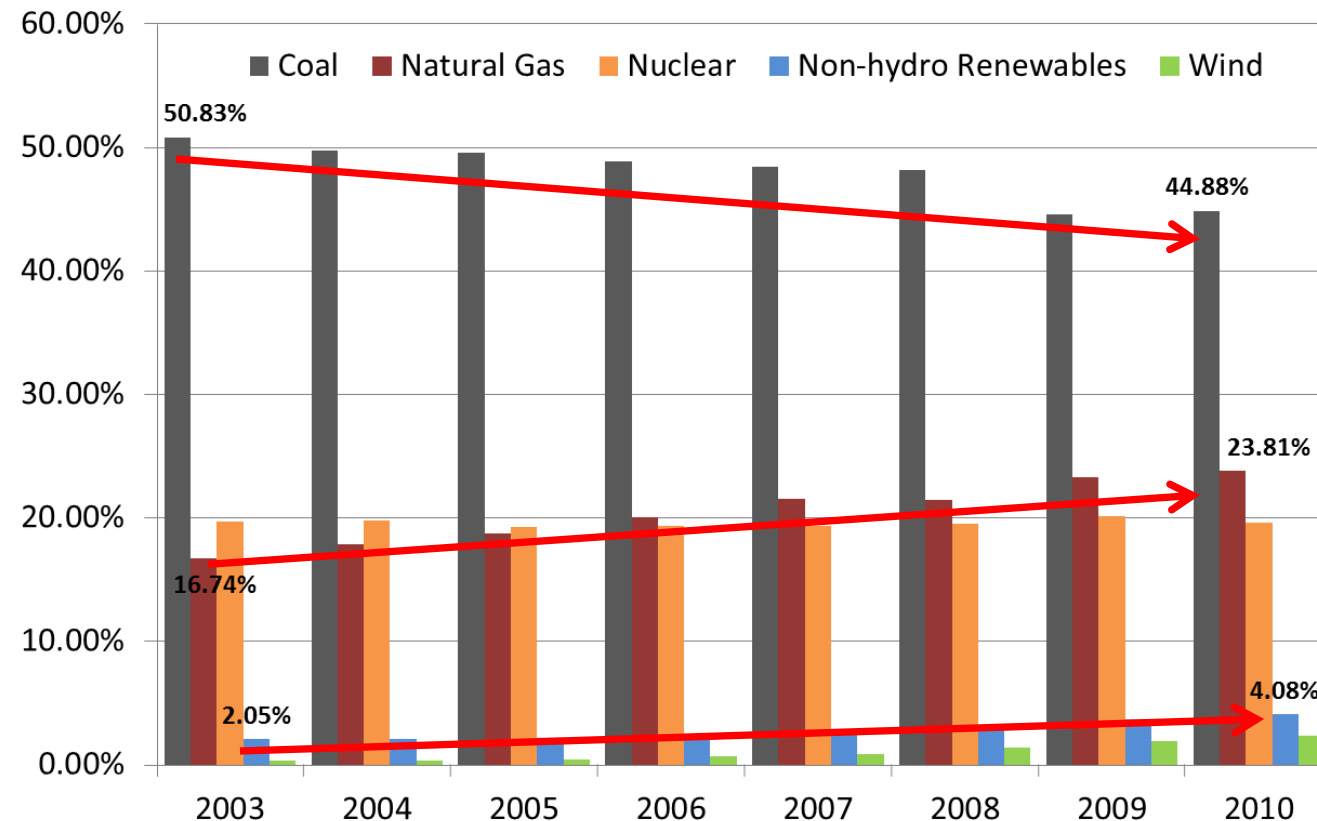


Economic and environmental benefits

Indiana's wind industry has generated:

- **Support for 1,000-2,000 total direct and indirect jobs in 2010**
- **\$21 million in annual property tax payments by wind project owners**
- **\$4 million in annual land lease payments**
- **An avoidance of over 2.3 million metric tons of carbon dioxide on an annual basis**

U.S. energy policy needs to support diversity.

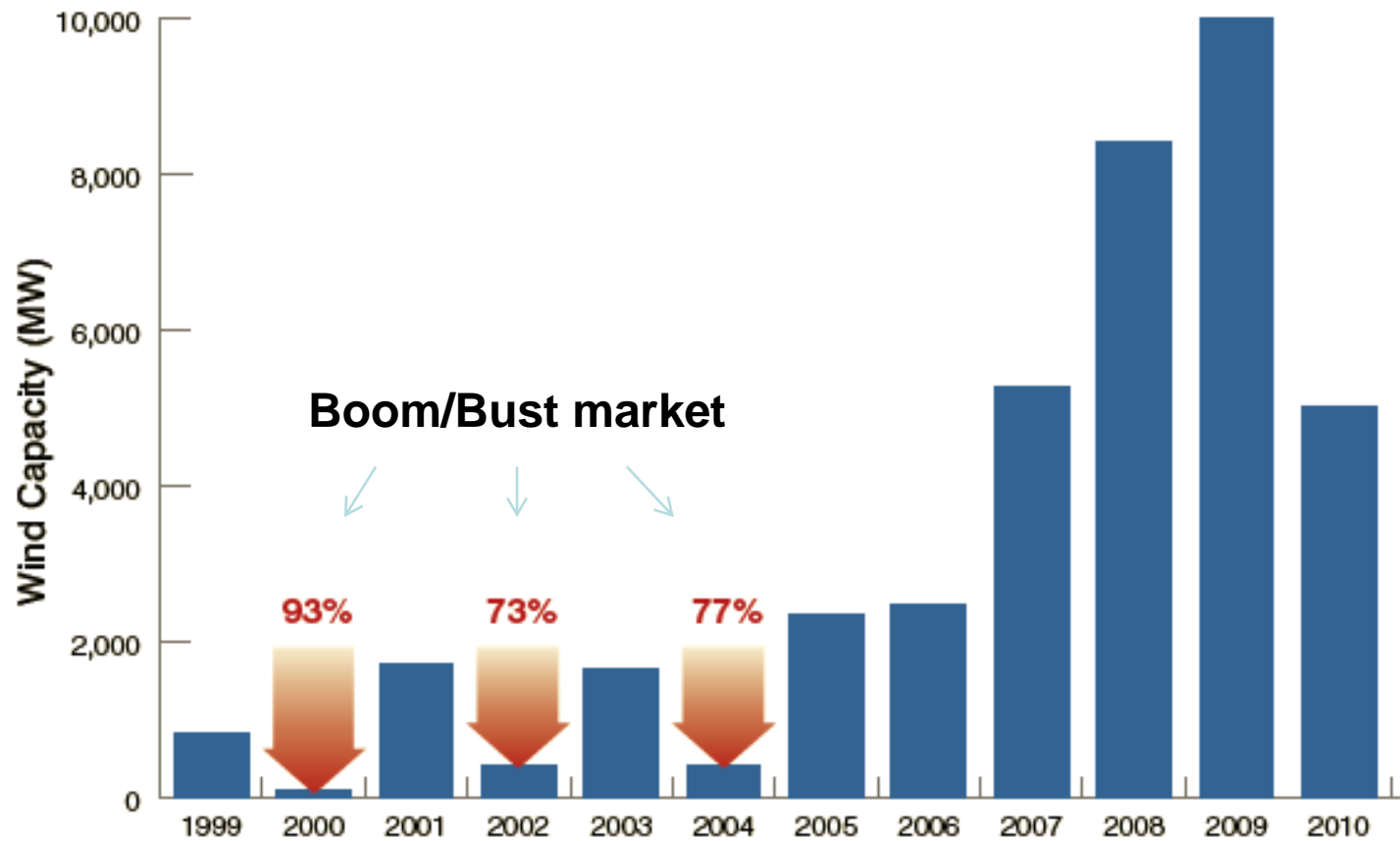


Coal Market Share,
Drop Since 2003
- 6.0 percentage pts

Natural Gas Market
Share Increase Since 2003
+ 7.0 percentage pts

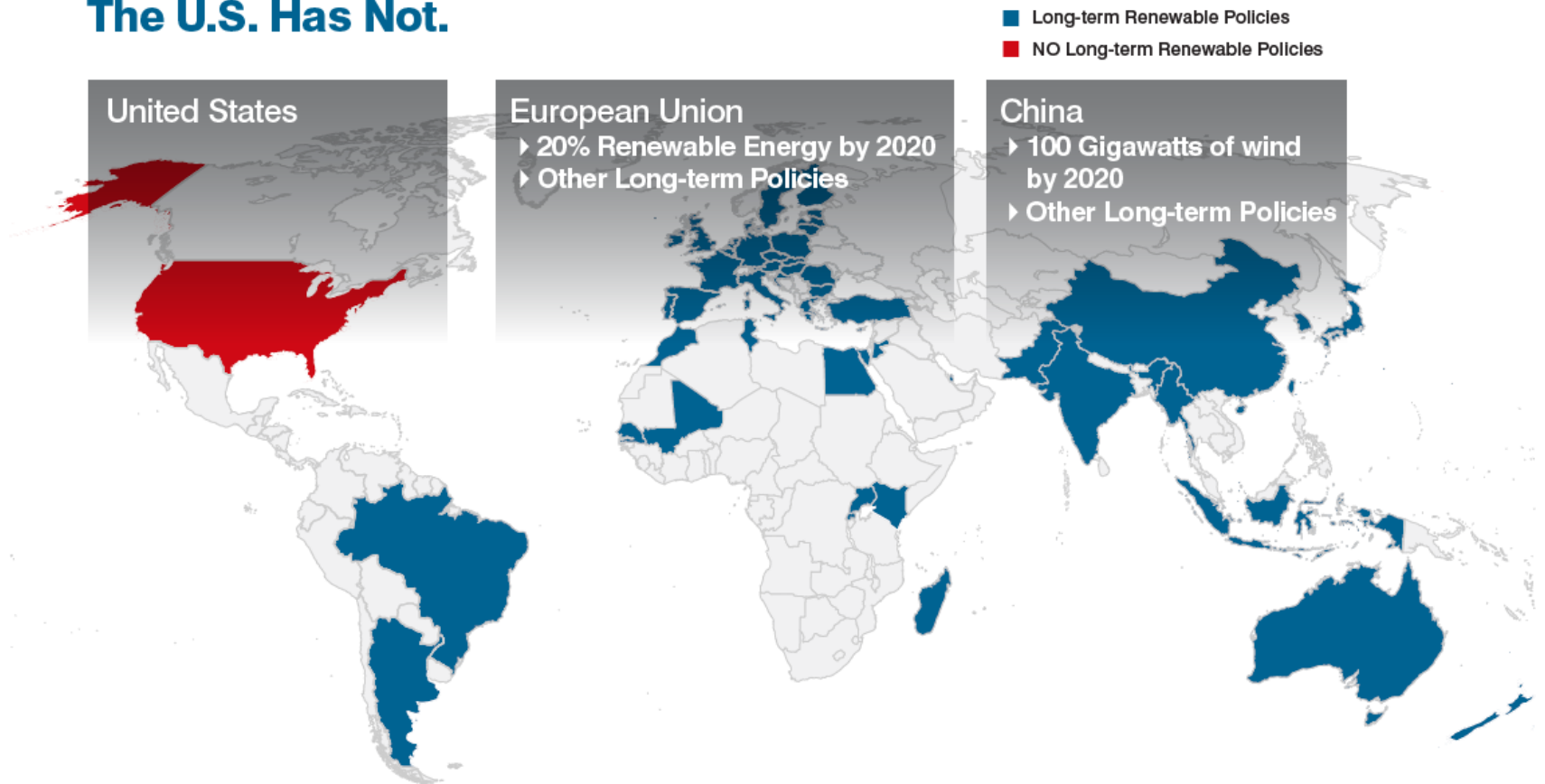
Renewable Market Share,
Increase Since 2003
+ 2.0 percentage pts

State of American wind power market



State of policy environment

37 Other Nations Have Enacted Long-term Renewable Policy. The U.S. Has Not.



Setting Policy for the Wind Energy Industry

AWEA “Manufacturing Working Group”

- **Recommends policy to the AWEA Board of Directors for wind energy manufacturing policy and related issues**
- **Next meeting in Des Moines, IA on September 13, 2011**
- **Held in conjunction with the AWEA Supply Chain & Manufacturing Workshop**
- **Open to all AWEA business members**
- **Contact Tom Maves (TMaves@AWEA.org) for more information and details on upcoming webinars and events**

Please join us at one of AWEA's upcoming workshops!

Fall 2011

AWEA Wind Power Supply Chain Workshop

September 12 – 13, 2011 | Des Moines, IA

AWEA Small and Community WINDPOWER 2011 Conference & Exhibition

September 15 – 17, 2011 | Des Moines, IA

AWEA OFFSHORE WINDPOWER 2011 Conference & Exhibition

October 11 – 13, 2011 | Baltimore, MD

AWEA Wind Energy Fall Symposium

November 2 – 4, 2011 | Carlsbad, CA

AWEA Wind Resource & Project Energy Assessment Workshop

December 14 – 15, 2011 | Seattle, WA

Spring 2012

AWEA Wind Power Health & Safety Workshop

January 9 – 10, 2012 | San Diego, CA

AWEA Wind Project Performance & Reliability Workshop

January 10 – 11, 2012 | San Diego, CA

AWEA Wind Power on Capitol Hill

February 7 – 8, 2012 | Washington, DC

AWEA Wind & Transmission Workshop

February 15 – 16, 2012 | Indianapolis, IN

AWEA Wind Power Project Siting Workshop

February 28 – 29, 2012 | Las Vegas, NV

AWEA Wind Power Supply Chain Workshop

March 6 – 7, 2012 | Chicago, IL

AWEA Wind Power Finance & Investment Workshop

April 12 – 13, 2012 | New York, NY

WINDPOWER® 2012

June 3 – 6, 2012 | Atlanta, GA